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09/915,080	07/25/2001	James J. Fitzgibbon	5569/69789	6492

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>06 March 2009</u>.

2a) ☒ This action is **FINAL.**   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1,3-6,8,10,11,23,24,26-29 and 39-45</u> is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1,3,6,8,10,11,23,24,26-29 and 39-45</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   The following is a final office action in response to the RCE filed 11/03/09.

Amendments received on 11/03/09/08 have been entered. Claims 1, 3-6, 8, 10-11, 23-

24, 26-29, and 39-45 are pending.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed

or described as set forth in section 102 of this title, if the differences between

the subject matter sought to be patented and the prior art are such that the

subject matter as a whole would have been obvious at the time the invention was

made to a person having ordinary skill in the art to which said subject matter

pertains. Patentability shall not be negatived by the manner in which the

invention was made.

3.   Claims 1, 3-6, 10, 23, and 39-45 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Gullman et al. (US# 5,280,527) in view of Dams et al. (US#

6,792,083).

        In claims 1, 39 and 45 Gullman et al. teach of a security control apparatus

comprising:

a security device (i.e. electronic gate/lock 10) {see Gullman et al, paragraph bridging

cols. 2 and 3};

a control apparatus (i.e. access device 12) responsive to security codes for enabling

and disabling the security device {see Gullman et al, col. 3, lines 19-35+};

a voiceprint/speech activated controller unit (i.e. security code Source unit 14) for

communicating a token (i.e. security codes) to the control apparatus 12, as shown in

figure 1, the security code source unit having a user controlled keypad and a voiceprint

analysis apparatus 14, as shown in figure 2, and including circuitry responsive to the

voiceprint analysis apparatus 14 for communicating to the control apparatus a security

code including a portion (i.e. user input challenge code, wherein the challenge code is

either using a keypad, writing tablet or by voice which is different than the first voice

signal for a security purpose) representing user interaction with the security code source

unit {see Gullman et al, col. 2, lines 40-47; paragraph bridging cols. 3 and 4}.

Although Gullman et al. does not disclose "a analysis apparatus comprises a

means for analyzing a first voice signal and a secondary access control selected from

the group consisting of a means for analyzing a second voice signal and a user

controlled keypad and the means for analyzing the first voice signal comprises a

speaker dependent voice analysis and the means for analyzing the second received

voice signal being voice independent , the secondary access control electronically

effected by a failure of the speaker dependent voice analysis to identify the first voice

signal, the secondary access control effected to analyze the second voice signal or

signal from the keypad without further analysis of the first voice signal when the speaker

dependent voice means fails to identify the first received voice signal", such features are

conventional as shown in Figure 3, steps 54-66 of Dams et al and described in column

4, lines 20-28. And in column 4, lines 48-62 Of Dams et al states;

In the reference of Dams (fig. 3), the Examiner is interpreting that the steps 58 and 68 are performed using the voice dependent mode (Dams discloses that the speaker dependent (step 58) and speaker independent (step 68) procedure can be executed coexistently; see col. 4, lines 44-46 (Note: in the reference of Dams, the speaker dependent and speaker independent procedures (steps 58 and 68) are interpreted as speaker dependent procedure as claimed in the present application), and step 72 (higher level) is performed using voice independent mode. And as disclosed by Dams, if the recognition in block 68 has led to a failure, in block 72 a higher level measure (interpreted as speaker independent as claimed in the present application) is taken such as asking the user person a non-speech entry (keypad; see col. 4, lines 35-39) or provide an additional question to the user that must be answered by yes/no (a second received voice signal (password)) (see col. 4, lines 50-52). So the system analyze the second voice signal after the failure of the speaker dependent voice analysis to recognize the first voice signal and without the necessity of a failure of a voice independent analysis , because system does not wait for the failure of the higher level measures to, to ask the user person for a non-speech entry. So in order for the system to reach to the higher level measures (step 72) failure of the speaker dependent analysis (step 58 and 68) is necessary, but for the system to ask the user for a non-speech entry, the failure of the higher level measures is not necessary. Dams further disclose that another level of higher measure (speaker independent) is to build in a check by key actuation, or to allow keying in of a particular phrase (another example of a keypad; see col. 4, lines 552-54). And as seen in fig. 3, step 72 (higher level

measures) is electronically effected by a failure of the speaker dependent voice analysis to identify the first voice signal and the secondary access control effected to analyze the second voice signal or signal from the keypad without further analysis of the first voice signal when the speaker dependent voice means fails (at step 68) to identify the first received voice signal.

The higher level measurement by "The additional question to the user that must be answered by yes/no only" and "another one is to build-in check by key actuation, or allow keying in of a particular phrase" is considered to be functionally equivalent to the claimed "secondary access control selected from the group consisting of a means for analyzing a second voice signal a user controlled keypad". Darns et al suggests that the serial combination of a speaker- dependent and speaker independent voice analysis means, as claimed, is advantageous because it is beneficial to both frequent and novice or accidental users {see Dams et al, col. 3, lines 3-4+ and lines 25-27+}. That is, using all recordings for training will always result in over-representation of frequent users and using only the failed recognition will result in performance oscillation, but all users will be able to use the system {see Darns et al, col. 3, lines 33-39}.

And also col. 1 lines 10-30, Darns further states: the speaker-independent recognition is used for terms and phrases that are considered common to many speakers such as various commands for effecting dialing and various other functions, and the speaker-dependent recognition is used to recognize private terms such as personal names and the like (col. 1 lines 14-21). Further the steps of figure 3 are performed automatically because Dams discloses that if the recognition in block 68 has led to a failure (meaning

the speaker dependent voice means fails to identify the first received voice signal) in

block 72, a higher level measurement (secondary access control) is selected, since the

user does not have to press or say any password or command to got the higher level

measurement, it means that system is automatically performing all the steps in fig. 3.

So based on the interpretation of the Dams, the speaker dependent analysis

(recognition performed till step 68) and speaker independent analysis (step 72; fig. 3)

are equivalent of the means for analyzing the first voice signal and means for analyzing

a second voice signal.

Therefore, it would have been obvious to one of ordinary skill in the art, at the

time of applicant's invention, to include the "speaker dependent voice analysis means

for analyzing a first received voice signal and a speaker independent voice analysis

means for analyzing a second received voice signal, the speaker independent voice

analysis means being activated to analyze the second received voice signal when the

speaker dependent voice means fails to identify the first received voice signal" of Dams

et al in the system of Gullman et al because, as taught by Dams et al, all users including

frequent and novice or accidental users, will be able to use the system.

In claims 3 and 5-6, Gullman et al teach the security code source unit comprises

memory {see Gullman et al, col. 4, lines 44-49} for storing a pass code (i.e. user input

challenge code) entered by a user in association with representations of speech

generated by the speaker independent voice analysis apparatus {see Gullman et al, col.

2, lines 40-47+; col. 6, lines 30-45+}.

In claim 4, Gullman et al teach the circuitry for communicating responds to predetermined comparison characteristics between a stored speech representation and a spoken speech representation for communicating a security code {see Gullman et al, col. 5, lines 60-65}.

In claim 10, Gullman et al teach the biometric samples are obtained and stored as templates for a single or multiple users {see Gullman et al, col. 5, lines 57-61+}.

Claim 23 recites the limitations of claim 1 and therefore rejected for the same reasons.

In claim 24, although Gullman et al does not disclose "the speaker independent voice analysis apparatus is enabled for a predetermined period of time after the barrier control apparatus is controlled to move the barrier", it would have been obvious to one of ordinary skill in the art, at the time of applicant's invention, to program the control apparatus 10 of Gullman to control the type of access or transactions {see Gullman et al, col. 6, lines 42-45} as claimed, because it saves energy as compared to being enabled all the time, to one of ordinary skill in the art, because it saves energy as compared to being enabled all the time. It also allows a user to change a given command when the action of a given command is not the desired result or allow a user to change a given command to prevent an accident from occurring.

Claim 40 recites a method for practicing the apparatus of claim 1 and therefore rejected for the same reasons.

Claim 41 recites a method for practicing the apparatus of claim 1 and therefore rejected for the same reasons. Further note that the "a spoken voice user password command" is taken to be a same as "first voice signal".

Claim 42, discloses the same limitations as disclosed in claim 10, so claim 42 is rejected as claim 10 above.

Claim 43, discloses the same limitations as disclosed in claim 5, so claim 42 is rejected as claim 10 above.

Claims 4, discloses the same limitations as disclosed in claim 1, so claim 44 is rejected as claim 1 above.

4.   Claims 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gullman et al. (US# 5,280,527) in view of Dams et al. (US# 6,792,083) and further in view of Pinzon (US# 6,161,005).

Claim 26 recites the limitations of claim 1, except Gullman et al does not disclose a barrier movement apparatus comprising a motor. Although Gullman et al does not disclose "a motor for operating the barrier", these claimed features would have been obvious in the system of Gullman et al as evidenced by Pinzon. Pinzon teaches, "all electronic door locking mechanisms have in common a motor for causing a mechanical locking member to move to a locking or unlocking position {see Pinzon, col. 4, lines 34-45} of a garage door" {see Pinzon, col. 2, lines 60-65}. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of applicant's invention, to include the motor for operating the barrier of Pinzon in the system of Gullman et al because, as taught by Pinzon, all electronic door locking mechanisms have in common a motor for

causing a mechanical locking member to move to a locking or unlocking position of a

garage door.

In claims 27-29, although Gullman et al does not disclose that "the speaker

independent voice analysis apparatus is enabled for a predetermined period of time

after the barrier control apparatus is controlled to move the barrier", it would have been

obvious to one of ordinary skill in the art, at the time of applicant's invention, to program

the control apparatus 10 of Gullman to control the type of access or transactions {see

Gullman et al, col. 6, lines 42-45} as claimed, because it saves energy as compared to

being enabled all the time. It also allows a user to change a given command when the

action of a given command is not the desired result or allow a user to change a given

command to prevent an accident from occurring.

5.   Claims 1, 3-6, 8 and 10-11, 23-24, 39-45 are rejected under 35 U.S.C. 103(a) as

being unpatentable over US 2003/0018478 {hereinafter "Mays"} in view of US

6,792,083 {Dams et al}, and further in view of USP 5,280,527 {Gullman et al}.

In claims 1, 4-6, 39 and 45 Mays teaches of a speech activatable door operator

system (i.e. security control apparatus 10) comprising:

a barrier or door (i.e. security device 20);

a base controller (i.e. control apparatus 36) responsive to security codes for enabling

and disabling the security device 20;

a speech activated controller unit (i.e. security code source unit 38, 46, 48, 50) for

communicating security codes to the control apparatus 36, as shown in figure 1, the

security code source unit having a user controlled keypad 56 and a voice analysis

apparatus 53, as shown in figure 2, and including circuitry responsive to the voice

analysis apparatus 53, as shown in figure 3, for communicating to the control apparatus

a security code [0021]-[0022]+. The voice analysis apparatus comprises a speaker

dependent voice analysis means and a speaker independent voice analysis means

{Mays, [0008], [0023]+}.

Although Mays does not disclose "the speaker independent voice analysis

means being activated when the speaker dependent voice means fails to identify a

received voice signal", such features are conventional as shown in Figure 3, steps 54-

66 of Dams et al, and described in column 4, lines 20-28.

In the reference of Dams (fig. 3), the Examiner is interpreting that the steps 58

and 68 are performed using the voice dependent mode (Dams discloses that the

speaker dependent (step 58) and speaker independent (step 68) procedure can be

executed coexistently; see col. 4, lines 44-46 (Note: in the reference of Dams, the

speaker dependent and speaker independent procedures (steps 58 and 68) are

interpreted as speaker dependent procedure as claimed in the present application), and

step 72 (higher level) is performed using voice independent mode. And as disclosed by

Dams, if the recognition in block 68 has led to a failure, in block 72 a higher level

measure (interpreted as speaker independent as claimed in the present application) is

taken such as asking the user person a non-speech entry (keypad; see col. 4, lines 35-

39) or provide an additional question to the user that must be answered by yes/no (a

second received voice signal (password)) (see col. 4, lines 50-52). So the system

analyze the second voice signal after the failure of the speaker dependent voice

analysis to recognize the first voice signal and without the necessity of a failure of a

voice independent analysis , because system does not wait for the failure of the higher

level measures to, to ask the user person for a non-speech entry. So in order for the

system to reach to the higher level measures (step 72) failure of the speaker dependent

analysis (step 58 and 68) is necessary, but for the system to ask the user for a non-

speech entry, the failure of the higher level measures is not necessary. Dams further

disclose that another level of higher measure (speaker independent) is to build in a

check by key actuation, or to allow keying in of a particular phrase (another example of

a keypad; see col. 4, lines 552-54). And as seen in fig. 3, step 72 (higher level

measures) is electronically effected by a failure of the speaker dependent voice analysis

to identify the first voice signal and the secondary access control effected to analyze the

second voice signal or signal from the keypad without further analysis of the first voice

signal when the speaker dependent voice means fails (at step 68) to identify the first

received voice signal.

As stated in column 4, lines 48-62 of Dams et al "the additional question to the

user that must be answered by yes/no only" is considered to be functionally equivalent

to the claimed "second received voice signal". Dams suggests that the serial

combination of a speaker-dependent and speaker independent voice analysis means,

as claimed, is advantageous because it is beneficial to both frequent and novice or

accidental users {see Dams et al, col. 3, lines 3-4+ and lines 25-27+}. That is, using all

recordings for training will always result in over-representation of frequent users and

using only the failed recognition will result in performance oscillation, but all users will

be able to use the system {see Dams e{ al, col. 3, lines 33-39}.

And also col. 1 lines 10-30, Dams further states: the speaker-independent recognition is used for terms and phrases that are considered common to many speakers such as various commands for effecting dialing and various other functions, and the speaker-dependent recognition is used to recognize private terms such as personal names and the like (col. 1 lines 14-21).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of applicant's invention, to include the "speaker dependent voice analysis means for analyzing a first received voice signal and a speaker independent voice analysis means for analyzing a second received voice signal, the speaker independent voice analysis means being activated to analyze the second received voice signal when the speaker dependent voice means fails to identify the first received voice signal" of Dams et al in the system of Mays because, as taught by Dams et al, all users including frequent and novice or accidental users, will be able to use the system.

Although Mays discloses that the keypad 56 may be used to condition the speech activation unit 53 [see Mays, paragraph 0021], Mays does not disclose "a security code including a portion representing user interaction with the security code source unit".

However, Gullman et al, teach of a security token (analogous to the claimed security code) that incorporates voiceprint information (i.e. speech) of a user with user input challenge code entered using either a keypad or by Voice and that the voiceprint is different that the challenge voice signal {see Gullman et al, col. 2, lines 40- 47+;

paragraph bridging cols. 3 and 4). Gullman et al suggests that combining a token {i.e. security code) with biometric information is advantageous because tokens provide security during transmission while the biometric information is used as an ID {see Gullman et al, col. 1, lines 32-45}. The systems of Mays and Gullman et al are analogous art because they are from the same field of endeavor, secured biometric access systems. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of applicant's invention; to combine tokens with the speech activated door operator system of Mays, as claimed, because, as taught by Gullman et al, tokens advantageously provide additional security during transmission.

In claims 3, 10, the security code source unit comprises memory/template {see Gullman et al, col. 4, lines 44-49} for storing a pass code (i.e. user input challenge code) entered by a user in association with representations of speech generated by the voice analysis apparatus {see Gullman et al, col. 2, lines 40-47+; col. 6, lines 30-45+}. Alternatively, multiple templates for multiple users are stored {see Gullman et al, lines 60-65}.

Claims 8, 11, and 23-24 recites the limitations of claim 1 and therefore rejected for the same reasons.

In claim 24, the speech activation unit 53 is enabled for a predetermined period of time until either the battery runs out or the function is changed via the keypad switch {see Mays, [0020]}.

Claim 40 recites a method for practicing the apparatus of claim 1 and therefore rejected for the same reasons.

Claim 41, discloses the same limitations as disclosed in claim 1, so claim 41 is rejected as claim 1 above. Further note that the "a spoken voice user password command" is taken to be a same as "first voice signal".

Claim 42, discloses the same limitations as disclosed in claim 10, so claim 42 is rejected as claim 10 above.

Claim 43, discloses the same limitations as disclosed in claim 5, so claim 43 is rejected as claim 5 above.

Claim 44, discloses the same limitations as disclosed in claim 1, so claim 44 is rejected as claim 1 above.

Response to Arguments

6.   Applicant's arguments filed 11/03/09 have been fully considered but they are not persuasive.

In response to applicant's argument on page 13 paragraph 1, that Dams does not make up the deficiencies of Gullman. Applicant further argues, that Dams does not discloses "the secondary access control effected to analyze the second voice signal or signal form the keypad after the failure of the speaker dependent voice analysis to recognize the first voice signal and without the necessity of a failure of a voice independent analysis." The Examiner respectfully disagrees.

In the reference of Dams (fig. 3), the Examiner is interpreting that the steps 58 and 68 are performed using the voice dependent mode (Dams discloses that the speaker dependent (step 58) and speaker independent (step 68) procedure can be executed coexistently; see col. 4, lines 44-46 (Note: in the reference of Dams, the

speaker dependent and speaker independent procedures (steps 58 and 68) are

interpreted as speaker dependent procedure as claimed in the present application), and

step 72 (higher level) is performed using voice independent mode. And as disclosed by

Dams, if the recognition in block 68 has led to a failure, in block 72 a higher level

measure (interpreted as speaker independent as claimed in the present application) is

taken such as asking the user person a non-speech entry (keypad; see col. 4, lines 35-

39) or provide an additional question to the user that must be answered by yes/no (a

second received voice signal (password)) (see col. 4, lines 50-52). So the system

analyze the second voice signal after the failure of the speaker dependent voice

analysis to recognize the first voice signal and without the necessity of a failure of a

voice independent analysis , because system does not wait for the failure of the higher

level measures to, to ask the user person for a non-speech entry. So in order for the

system to reach to the higher level measures (step 72) failure of the speaker dependent

analysis (step 58 and 68) is necessary, but for the system to ask the user for a non-

speech entry, the failure of the higher level measures is not necessary. Dams further

disclose that another level of higher measure (speaker independent) is to build in a

check by key actuation, or to allow keying in of a particular phrase (another example of

a keypad; see col. 4, lines 552-54). And as seen in fig. 3, step 72 (higher level

measures) is electronically effected by a failure of the speaker dependent voice analysis

to identify the first voice signal.

Similar limitations are recited in independent claims 23, 26, 40, 41, 44, and 45 are

rejected on the same bases as disclosed above.

Conclusion

7.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to /NABIL H. SYED/ whose telephone number is (571)270-3028. The examiner can normally be reached on M-F 7:30-5:00 alt Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Zimmerman can be reached on (571)272-3059. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/NABIL H SYED/
Examiner
Art Unit 2612

N.S

/Brian A Zimmerman/
Supervisory Patent Examiner, Art Unit 2612